

**Translation of notes from foreign associate accompanying cited
Japanese patent document**

Cited document 4:

JP Utility Patent-Laid-Open Document No. 52-108551 of 8/18/1977

Application No. 51-15555 of 2/13/1976

Priority: none

Applicant: Toshiba Corporation, Kawasaki City, JP

Title: Overvoltage Protection Device

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3. Detailed Explanation of the Innovation

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The present innovation provides an overvoltage protection device that is able to be manufactured cost-effectively, which monitors voltages of the individual voltage supplies using an overvoltage protection device and, in the case of at least one voltage supply having an overvoltage, the voltage supply of the entire system is broken off, whereby the entire system is securely protected from an overvoltage, using one overvoltage protection device.

In the following, the present innovation will be explained with the aid of the exemplary embodiment shown in the drawing. In the figure, the individual components of low-capacity constant voltage control devices 1, 2, 3 and 4 are mounted on the individual printed-circuit boards, along with the additional overvoltage protection devices, in order to supply constant voltage to consumers R_1 , R_2 , R_3 , R_4 of the electronic component like an IC. In constant voltage control devices 1 - 4, as shown in the figure, transformer 10 supplies a DC voltage from a smoothing circuit composed of rectifiers 11, 12 and a capacitor 13, via a fuse 14.

These output voltages of constant voltage control devices 1-4, having low capacity, are supplied to the individual consumers R_1 - R_4 , and are supplied as input to overvoltage detector 21, according to the opposite arrangement of the positive poles by diodes 17, 18, 19, 20. This means that an overvoltage detector 21 is available in common for the individual constant voltage control devices 1 - 4, and is designed in such a way that the output in response to activating same renders thyristor 16 of a short circuit connection, provided on the network circuit, composed of resistor 15 and thyristor 16, conducting.

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公開実用新案公報

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審査請求 未請求

(全 1 頁)

⑤過電圧保護装置

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①実 願 昭51—15555

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⑤実用新案登録請求の範囲

図面の簡単な説明

同一電源から附勢されそれぞれの負荷に定電圧を供給する複数の定電圧制御装置と、この各定電圧制御回路の出力電圧が並列的に入力されその入力電圧が設定値以上になったときに出力する過電圧検知装置とからなり、前記過電圧検知装置の出力で各定電圧制御装置の電源を断つようにした過電圧保護装置。

図面は本考案の過電圧保護装置の一実施例を示す回路図である。

1, 2, 3, 4……定電圧制御装置、 R_1, R_2, R_3, R_4 ……負荷、10……変圧器、17, 18, 19, 20……ダイオード、21……過電圧検出装置。

